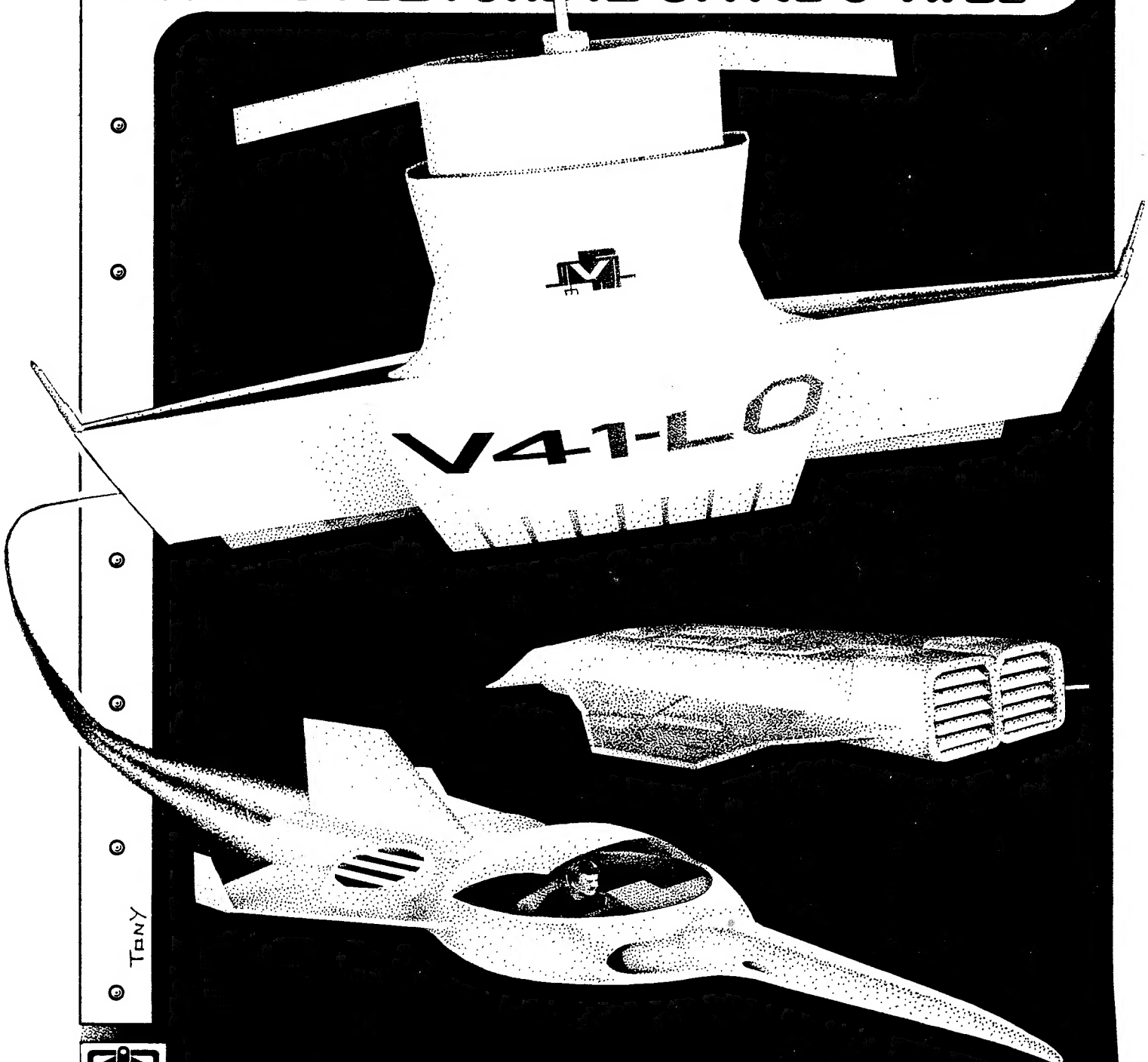
THE SPACE PIRATES

DOCTOR WHO

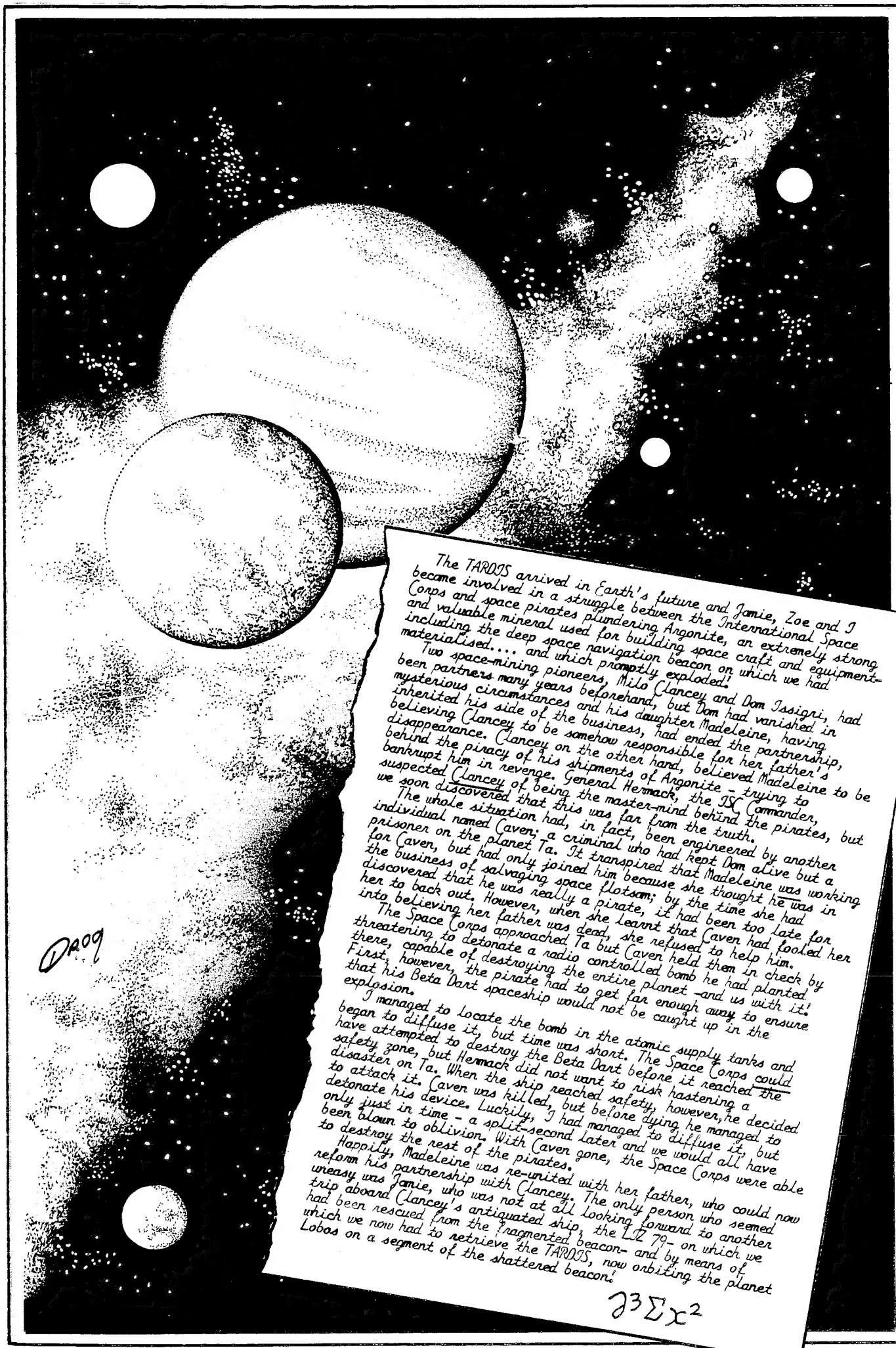
AN ADVENTURE IN SPACE & TIME



TONY

CMS

CODE: Y.Y. *Robert Holmes*



The TARDIS arrived in Earth's future and Jamie, Zoe and I became involved in a struggle between the International Space Corps and space pirates plundering Argonite, an extremely strong and valuable mineral used for building space craft and equipment - including the deep space navigation beacon on which we had materialised.... and which promptly exploded!

Two space-mining pioneers, Milo Clancey and Dom Issigri, had been partners many years beforehand, but Dom had vanished in mysterious circumstances and his daughter Madeleine, having inherited his side of the business, had ended the partnership, believing Clancey to be somehow responsible for her father's disappearance. Clancey on the other hand, believed Madeleine to be behind the piracy of his shipments of Argonite - trying to bankrupt him in revenge. General Hermack, the ISC Commander, suspected Clancey of being the master-mind behind the pirates, but we soon discovered that this was far from the truth.

The whole situation had, in fact, been engineered by another individual named Caven; a criminal who had kept Dom alive but a prisoner on the planet Ta. It transpired that Madeleine was working for Caven, but had only joined him because she thought he was in the business of salvaging space flotsam; by the time she had discovered that he was really a pirate, it had been too late for her to back out. However, when she learnt that Caven had fooled her into believing her father was dead, she refused to help him.

The Space Corps approached Ta but Caven held them in check by threatening to detonate a radio controlled bomb he had planted there, capable of destroying the entire planet - and us with it! First, however, the pirate had to get far enough away to ensure that his Beta Dart spaceship would not be caught up in the explosion.

I managed to locate the bomb in the atomic supply tanks and began to diffuse it, but time was short. The Space Corps could have attempted to destroy the Beta Dart before it reached the safety zone, but Hermack did not want to risk hastening a disaster on Ta. When the ship reached safety, however, he decided to attack it. Caven was killed, but before dying he managed to detonate his device. Luckily, I had managed to diffuse it, but only just in time - a split-second later and we would all have been blown to oblivion. With Caven gone, the Space Corps were able to destroy the rest of the pirates.

Happily, Madeleine was re-united with her father, who could now reform his partnership with Clancey. The only person who seemed uneasy was Jamie, who was not at all looking forward to another trip aboard Clancey's antiquated ship, the LZ 79 - on which we had been rescued from the fragmented beacon - and by means of which we now had to retrieve the TARDIS, now orbiting the planet Lobos on a segment of the shattered beacon!

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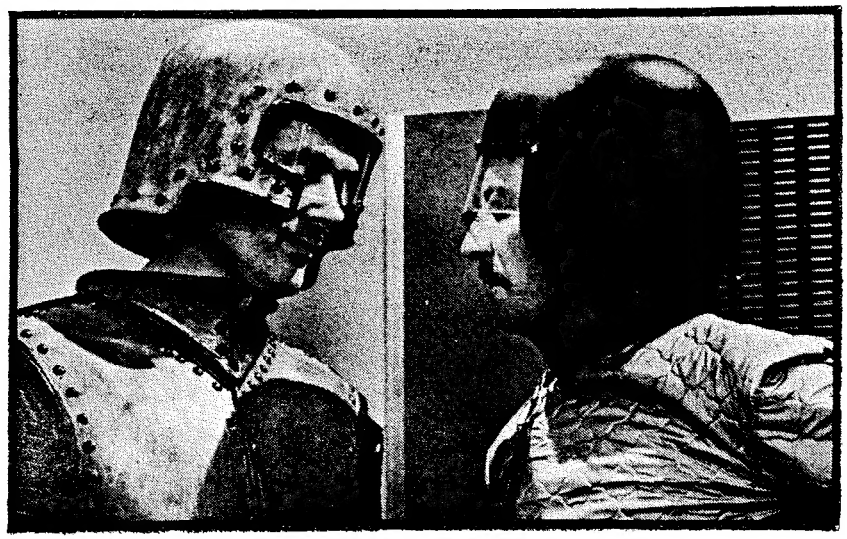
DRAMA EXTRACT



Accustoming their eyes to the faint light filtering in through the ventilation grille, the four prisoners took stock of their surroundings. They were astonished to see that, although deep in the mines of the planet Ta, the room appeared to be decorated, very incongruously, in the manner of an Edwardian study. Peering myopically up at a gilt-framed oil painting hanging on one wall, Milo gave a gasp of recognition.

"Land's sakes alive! It's Dom himself. That picture - it's Dom Issigri."

"Madeleine's father?" asked Zoe.

"Yuh, and quite a fella he was too, young woman. This was the old fella's private study...Land's sakes, it's years since I've been here."

Having just banged his shin on a heavy footstool, the Doctor's thoughts were of a more prosaic nature. "You don't happen to remember where the light switch is, do you by chance?" he enquired dourly.

"You won't find any light switches in here, Doctor. You might find candles or something."

"Candles!" exclaimed Jamie. "In this day and age?"

"Or an oil lamp or something. Look in that cupboard, you might find some."

As Zoe groped her way obediently towards the sturdy-looking wall cabinet, Milo's world began to take on a rosy hue. "Good old fashioned, romantic, traditional old Dom," he breathed. "He brought all his clothes, all those old books from Earth you know..."

"Are these candles?" asked Zoe.

"Ah yes, well done, a whole box of them," praised the Doctor, taking it from her.

Gingerly the girl selected one of the white, tallowed rods and turned it over in her hands, puzzlement creasing her brow. "How do they work?"

"How do they work!" echoed Jamie, a broad smile on his face. So, there was something she didn't know after all.

The Doctor handed Zoe the box. "Take these and I'll show you," he said, rumaging furiously in his pockets.

"We need a flint box don't we?" asked Jamie.

"It's all right, Jamie, I've got some matches. You just light the wick, you see, Zoe, and the wax allows the wick to burn fairly slowly...There we are." Concluding his demonstration the Doctor began darting about like a conjuror, lighting candles and dotting them around the dust-laden room. As the light grew stronger, more of the room's furnishings became visible: a gramophone player, an old radio, a ponderously ticking Victorian clock; all priceless antiques, and a source of great fascination to the Doctor and Milo.

"Hey, Doctor. You know there's something I don't understand," began Milo. "Why did Madeleine allow Caven to put us in here?"

"Why not?" shrugged Zoe.

"Well, as I said, this used to be the old fella's private study, and she had it all locked up when he disappeared, so I was told. Madeleine swore that nobody would ever come in here again."

"And nobody has," added Jamie. "Look at all the dust everywhere."

The Doctor raised an eyebrow. "Well, I think someone's been in here quite recently."

"Why do you say that?" asked Milo.

"That clock," he replied, indicating the old wooden timepiece in one corner.

"What about it?" queried Jamie.

"That's an eight day movement, Jamie," replied the Doctor.

Milo was confused. "But why would anybody come down here just to wind a clock?"

"That's what I'm wondering..."

STORY REVIEW

Trevor Wayne

Rightly or wrongly, I assumed 'The Space Pirates' to be set further in the future than the story which immediately preceded it, and thus to be a vindication of Daniel Eldred's expressed faith in the future of interplanetary travel. For now we are out on the high frontier, where man is boldly blazing trails through the star-strewn wilderness of space; a great gulf filled with opportunity and wealth for those daring and tenacious enough to seek it, but a place where dangers lurk in the darkness for the unwary.

This story is located firmly in the realm of 'space opera' - a Western set in outer space, complete with an irascible old prospector ruined by outlaws, Milo Clancey (Gordon Gostelow in a part surely written for Gabby Hayes or Walter Brennan), whose faithful mule is an antiquated spaceship called the LIZ 79 (which surely should have been the CLEMENTINE '49). The outlaws, the "space pirates" of the rather lacklustre title, bearing such names as Maurice Caven and Dervish (surely lifted straight from a Victorian melodrama) are as black-hearted and unscrupulous a bunch as you could ever hope never to meet. Dudley Foster, Caven the pirate chief, recovered from his apparent embarrassment of having to wear a rivetted coal-scuttle-like helmet and rubber space suit, to appear in a similar role in Hammer Films' "space western" 'Moon Zero Two' almost immediately after. In opposition to the pirates, maintaining law and order, are the men and machines of the International Space Corps headed by General Nicolai Hermack, splendidly portrayed by Jack May who unfortunately was instantly recognisable and still remembered by many as Sims, the butler of involuntary Victorian time traveller Adam Adamant. Giving able support to the General is his deputy, Major Ian Warne, played by Donald Gee with a mid-Atlantic accent worthy of Steve Zodiac, Troy Tempest or one of the Tracey family.

Yes, 'The Space Pirates' has almost everything; ray guns, space craft - the model work, in particular Hermack's V Ship with its attendant "Minnows" (a silly name), is excellent - treachery, violence and even humour. Only three important ingredients are missing: aliens, pace and - largely - the Doctor and his companions. My sister, a regular viewer since the beginning of the series, gave up on this serial, which she found boring. It would undoubtedly have gained a great deal had the Wild West analogy been extended to include a space-age version of the Plains Indians. An interplanetary nomadic culture, preferably non-human, being forced back by expanding mankind would have given an extra moral element to the story and provided a memorable visual 'hook' - assuming that the creatures' costumes were as good as those of the Ice Warriors. The inclusion of such creatures would have provided a means of filling the apparent long gaps in the action, thus adding pace and excitement to the story and in all probability transforming it into a well-remembered 'classic'. Clearly an attempt was made to approach space travel in a realistic way, and the vastness of space was emphasised by the time it took the space craft to get from one planet to another. The result

invites comparison with Kubrick's epic (and still to many people incomprehensible) '2001: A Space Odyssey'; but whereas MGM's huge budget and the wide screen (or even Cinerama if you were lucky enough) were able to provide a spectacle that so overwhelmed the audience they did not realise all they were getting was a very laboured re-telling of Arthur C. Clarke's short story 'The Sentinel', the time and money allotted to six episodes of 'Doctor Who' could not hope to achieve the same level of visual trickery.

A better model to have taken would have been the American TV series 'Star Trek', which was just finishing its final season Stateside and which the BBC was about to purchase to show in the 'Doctor Who' slot during the latter half of 1969 - a series of which the 'Doctor Who' production team must surely have been aware.

'Star Trek' was a product of the American commitment to placing a man on the Moon and returning him by the end of the decade; a promise about to be fulfilled by Project Apollo. And there lay the problem for the producers of any science fiction programme at that time - real space travel was proving much more interesting and exciting. Apollo 9 went into a ten day orbit about the Earth to test the docking procedures and other functions of the Lunar Excursion Module just before the first episode of 'The Space Pirates' was broadcast.

The story might have been more memorable, despite all the foregoing, if only the regular cast had had more time on screen. If I had been told that this script was adapted from one which did not originally feature the time travellers - as was the case with the first Robert Holmes script used in the series - I would have believed it. Even in the final, screened version the Doctor and his two friends seem totally ancillary to the main plot, relegated virtually to a sub-plot. Zoe, dressed in an apparently predominantly white outfit, with brief shorts in place of the hitherto customary micro-mini skirt, once again effortlessly proved that she had far nicer legs than Jamie, notwithstanding his kilt. It is in this story, however, that the Scot at last has a chance to score over the ever-brilliant Zoe, when she reveals that she has never heard of candles.

Our heroes spend too much time in the background; drifting ever further into space for the first two episodes whilst the main action is with the other characters, then stumbling around falling down holes and easily into the clutches of the villains, until in the final episode the Doctor is able to deactivate the device that would have destroyed the entire planet of Ta, thus saving the day and enabling the Space Corps to destroy the pirates in a final piece of spectacular model work.

Undeniably there is a place in 'Doctor Who' for stories where the time travellers are only ancillary to the events in the world on which they materialise, and perhaps the vast distances travelled in this story are ample excuse for the Doctor being so far from the centre of the action until the very last minute. However, the fact remains that despite many excellent ingredients, this story remains eminently 'forgettable'.

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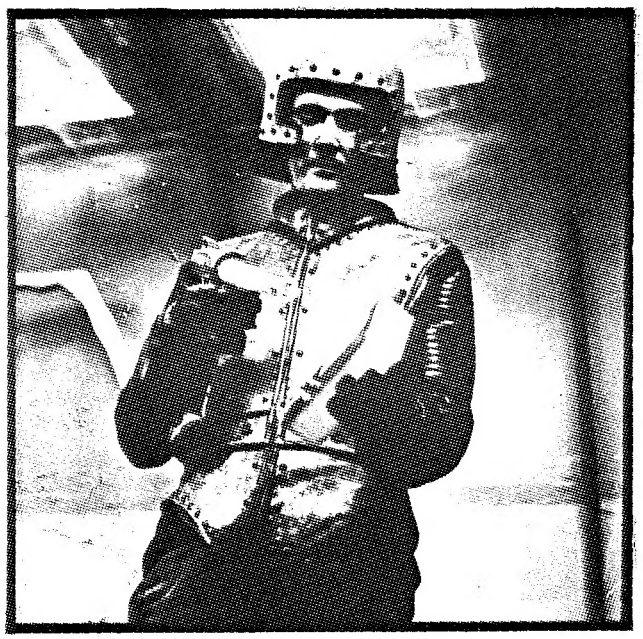
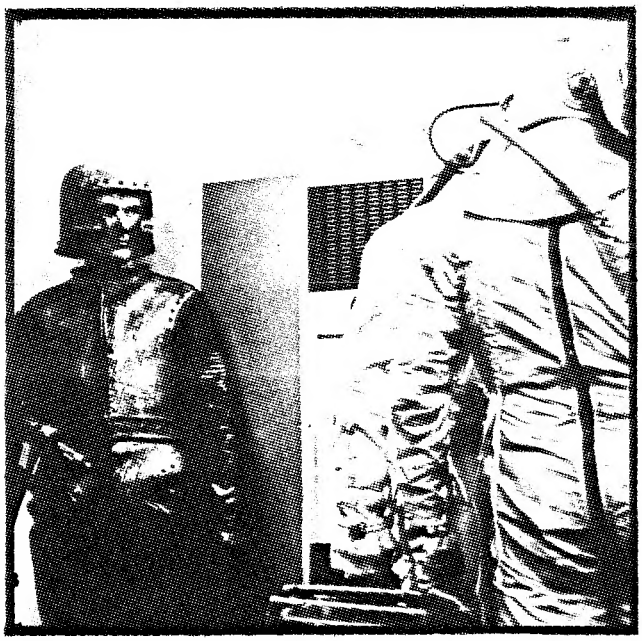


SPACE AND TIME

FLASHBACK



TOP LEFT: Maurice Caven, the chief of the space pirates.

CENTRE LEFT: Major Ian Warne and General Nicolai Hermack on the bridge of the V Ship.

CENTRE RIGHT: The time travellers find themselves in another dangerous situation on Beacon Alpha-4.

BOTTOM LEFT: Caven and his space-suited pirates attack the beacon.

2001: A SPACE PIRACY

Jeremy Bentham

One of the most memorable features of 'The Space Pirates' is its outstanding modelwork, the responsibility for which was Designer John Wood's. Wood designed and blueprinted all the model craft seen in this serial - the V Ship, the Beta Dart, the Minnows, the Alpha Beacons and the LIZ 79 - plus a number of miniature sets, such as the launch bays of the Minnow fighters. These designs were then given for realisation to an external props company called 'Magna Models', a company frequently used by the BBC's 'Space Unit' when they needed authentic models of Apollo or Soyuz craft.

Pride of the collection built by 'Magna Models' was the Beta Dart, a superbly engineered vehicle, five feet in length, constructed over a tube steel chassis and soft wood frame. Exterior detailing was done in fibre-glass and plasta-card, with an internally powered lighting ststem. Not only was the lighting used conventionally (say, for the wing-tip beacons) but also, for the first time in 'Doctor Who', to represent thruster and retro engines firing, in place of the standard rocket charges. Due to the size and weight of the heavier models, they could not be flown on wires. Instead, each one had a hole concealed in its hull enabling it to be mounted on a black velvet covered pole for filming against a black backdrop.

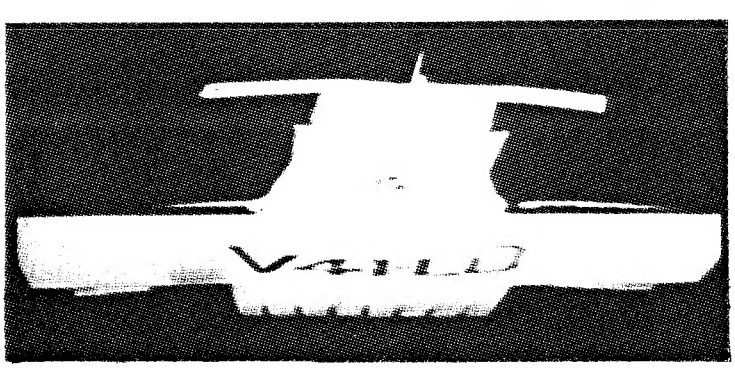
Filming of the models was also farmed out to an exterior company - in this case 'The Bowey Group', miniature specialists who shot all the sequences on their own model stage using 35mm film equipment. Unlike previous model filming for 'Doctor Who', it was the camera that moved rather than the models themselves. Each model was mounted on a pylon and the camera allowed to move over it, running on a small rail track (dolly) to eliminate any vibration or wobble. Even in the sequence where the Beta Dart had to be docked with the phoney Issigri name plate cone, it was the camouflaged cone which moved, not the space ship.

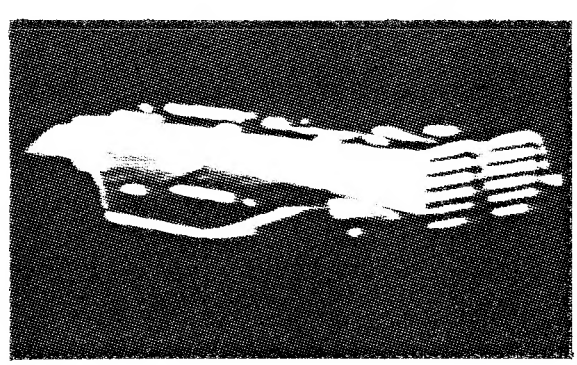
The only model which was flown on wires was the Minnow fighter, but even then this was not done in the conventional manner. Instead of the model being suspended from vertical wires, twin parallel wires were run through the hull, fore to aft, and stretched taut like clothes lines. Thus the model could run freely along the length of the wires and fly quite smoothly. Furthermore, if a technician lightly tilted one of the wires, the model could even be made to bank. This technique, often referred to as the 'Lydecker Method' after Howard Lydecker who developed it for Irwin Allen, was particularly effective for the launch of the Minnow from the V Ship. Here, the model was shot in reverse flying backwards into the launch bay, such that in the finished sequence it appeared to be catapulted out into space. Since only one Minnow model was built (capable of firing missiles from twin tubes beneath the cockpit - in reality electrically activated flash charges), this launch sequence was shot from several different angles to give the impression of a whole squadron lifting off. Where several Minnows had to be seen together (e.g. the attack on the Beta Dart in episode six) the film of one Minnow in flight was backwound and the sequence shot again with the model in a different position.

Some mechanical floor effects were done with the models. The fragmenting of the Alpha-4 beacon was achieved very simply by attaching the segments to wires and pulling them away from the hub frame, while a small, electrically detonated magnesium charge served for the sequence of the LIZ 79 firing its needles which so incapacitated Warne's Minnow. Possibly the most difficult mechanical effects to achieve convincingly, however, were the shots of a pirate spaceman floating over the beacon, attaching the explosive charges. This was done using a fully articulated marionette puppet, which had to be photographed in real time.

In some scenes, the need for model filming was avoided altogether by the use of Telejector-mounted 35mm caption slides. This technique was used, for example, to show Warne's Minnow trapped in the field of needles.

Thus, although hardly up to the standard of that seen in Stanley Kubrick's new film, '2001: A Space Odyssey', the modelwork in 'The Space Pirates' was certainly far more advanced than anything used in 'Doctor Who' before, and the latest step in a gradual process of technical innovation and development.





PETER BRYANT

Susan James

"I was an actor originally, for a number of years," explains Peter Bryant, when asked about his background. "Then I went into the BBC - into BBC Radio. The acting was getting a bit difficult, so I took a summer job as a relief Announcer." This went very well, and Bryant's temporary contract was extended a number of times until eventually he was offered a permanent position as an Announcer. While doing this job, he started to write scripts for radio plays in his spare time, some of which were subsequently commissioned. "On the strength of that," he recalls, "and because I had a pretty heavy theatrical background, I moved over into the Drama Department on radio. First of all I was working as a script editor, then I began to direct plays and eventually I ended up being Head of the whole Drama Script Unit there, as well as producing and directing. I suppose this was after a period of about seven years, all together. Then I began to get itchy feet again and I began to find that radio was a little bit boring, a little bit restricting. There was never enough money to do things properly and a lot of the plays we had to do were very second rate, written by semi-pro's or amateurs. Some were great, some were lovely, but some..."

Bryant therefore made up his mind to seek a transfer from radio to television - and as Shaun Sutton, television's Head of Serials at that time, was a very old friend of his, he had little difficulty in gaining an initial six months' attachment. He counts himself very lucky that Sutton assigned him straightaway to 'Doctor Who', to work alongside outgoing Script Editor Gerry Davis. As he explains, "I was there long enough to be able to slip into Gerry's seat when he left, with no difficulties." Bryant thus gained his first credits as the show's Script Editor on the latter episodes of 'The Evil of the Daleks' (Serial "LL"). However, the following story, 'The Tomb of the Cybermen' (Serial "MM"), saw him temporarily elevated to the position of Producer. This came about simply as a result of him asking Innes Lloyd, the current incumbent of that post, if he could handle a story by himself. "Innes knew that I wanted to be a producer," he remembers, "and by then I had a pretty solid background in the business, one way and another; I had all the qualifications one needs to be a producer. I'd done it all. So Innes said 'Yes, fine, sure'. I think he may also have felt that since he wanted to leave the programme, if he had someone ready to take over from him it would be a lot easier."

Bryant passed this early test with flying colours, as 'The Tomb of the Cybermen' proved to be one of the most popular stories in the history of 'Doctor Who' - not only with the general viewing audience but also with one of the show's creators, Sydney Newman. As Bryant explains, "The morning after the first episode went out I had a marvellous telephone call - I've never forgotten it - from Sydney Newman. He just phoned me up to say that he'd seen it and how great he thought it was. That was terrific, very nice - the kind of thing Sydney did. Great guy."

If there had ever been any doubts about Peter Bryant's abilities as a producer, they must surely have been dispelled by this successful 'apprenticeship'. Thus when Innes Lloyd left the series shortly afterwards, Bryant's appointment as his successor was virtually a foregone conclusion. But Lloyd's was certainly not an easy act to follow, as under his guidance an exceptionally successful 'formula' had been developed for the Patrick Troughton stories which had gained the show a great deal of popularity and praise. In retrospect however there are two closely-linked stories of the fourth season which can be seen as having been particularly significant in paving the way for much of what was to follow; the 'prototypes' of the programme's new formula - 'The Tenth Planet' (Serial "DD") and 'The Moonbase' (Serial "HH"). In 'The Tenth Planet' an isolated scientific base (the Snowcap base) inhabited by a small group of humans under the command of a strong-willed authority figure (General Cutler) was seen being attacked and infiltrated by a race of terrifying alien monsters (the Cybermen). Clearly Lloyd and his team must have realised that the great popular success scored by this story was due as much to its format as to the new monsters it introduced, as in 'The Moonbase' - just four stories later - many of the same ideas were re-used and refined.

These story elements present in 'The Tenth Planet' and 'The Moonbase' formed the basis of the programme's new formula and were to recur time and time again, in various different forms and permutations, throughout the remainder of Innes Lloyd's tenure as Producer. The 'monsters attack isolated group of humans' scenario gave rise to some of the most frightening situations ever presented in 'Doctor Who', while the striking contrast between the strangely-garbed and highly individual time travellers and the ranks of uniformed, subservient humans they habitually encountered afforded ample scope for dramatic and humorous action and dialogue. The sight of the Doctor and his companions creating havoc in yet another well-ordered establishment was frequently a joy to behold, while the Doctor's clashes with the various authority figures he came up against - Hobson, the Pilot, the Commandant, Clent and

so on - were equally memorable. Moreover, Lloyd's policy of setting most of the stories on Earth in recognisable, identifiable surroundings only served to heighten their effectiveness by bringing the dangers faced by the travellers that much closer to home.

With the programme already working to such a well-tried and eminently successful formula, Peter Bryant was understandably in no hurry to make any major changes when he took over from Lloyd as Producer - on the contrary, he was very keen to retain and develop the series' most successful features, such as the recurring monsters. "I did want to keep the monsters going, very much so," he affirms. "The kids do love the monsters, even though they look through their fingers at them. I think the monsters are good for the kids, but they're very difficult to make work because you can never afford to have enough of them; they're extremely expensive!"

Similarly, Bryant was also very eager to continue with the policy of setting most of the stories on Earth and as far as possible in the present day. "I thought it was a good idea to do that," he explains, "so that the kids could identify with what was going on. They'd know if a story was in the Underground, because they'd know what an Underground station looks like. I didn't necessarily think there was anything lacking in the more fantastically-orientated stories, I just thought 'Let's get back down to Earth again. Let's get somewhere where the kids can identify with the actors, with the characters.'"

Bryant's appointment as Producer had, of course, left a vacancy for a script editor. Victor Pemberton - an old acquaintance of Bryant's from his days in radio - had already been considered for this job and given a 'trial run' on 'The Tomb of the Cybermen'; but in the event the post went to Derrick Sherwin. Of Sherwin's entry into the series Bryant says: "He had written to Shaun Sutton and Shaun had seen him and spoken to me about him. He'd said that there was this guy - an actor who had done some writing as well - who wanted to come into the Beeb and work as a script editor, and would I like to meet him? So I did, and said O.K."

Shaun Sutton was also responsible for putting forward the names of a number of the directors who subsequently worked on the programme during Peter Bryant's time as producer. As Bryant explains, "Shaun tried to encourage us to take people who possibly weren't getting the sort of beginnings or not getting quite as much work as they should have been. A lot of the first timers who came in, he wanted me to give 'em a go - and I did." Of the established directors, Bryant singles out Douglas Camfield for special praise, saying that he could never have enough of the man's work; he was, quite simply, "the best".

'Doctor Who' did not receive a great deal of publicity in the late 1960s, but this was not a matter of serious concern to Bryant. He points to two reasons for the lack of media coverage: firstly that the BBC had never been "geared up" to publicise its programmes and had no reason to make an exception with 'Doctor Who', secondly that Patrick Troughton was unwilling to become involved in publicity campaigns. He doubts, however, that Troughton's reluctance to venture into this field was due to any shyness on the actor's part: "I wouldn't have said he was particularly shy, Patrick. It's quite an onerous role, you know, this Doctor Who part; you carry the whole bloody show really. It takes it out of you. I think Patrick wasn't keen on <u>any</u> side bits of publicity that would come up for the show. He'd want just to do the job and go home to his wife and kids. He really wasn't interested in it." Bryant adds that Troughton was "just about" happy in the series at the time he took over as Producer - "but he was looking for a way out!" Indeed, this was a matter which was much on Bryant's mind at the time of transmission of 'The Space Pirates'. For once, the series <u>did</u> receive some publicity as reports appeared in the newspapers that Patrick Troughton would soon be giving up his role as the Doctor, and that the search was on for his successor...

TECHNICAL OBSERVATIONS

Impressed by Robert Holmes' script for 'The Krotons' (Serial "WW"), Derrick Sherwin commissioned him to write 'The Space Pirates' knowing that he needed a script delivered fairly quickly that would require a minimum amount of editing work to prepare it for production.

As 1968 became 1969, Peter Bryant was told that he had been appointed as Producer for the BBC's 'Paul Temple' series. Thus, although his name appeared on the credits of 'The Space Pirates', he actually had very little involvement with it. This left 'Doctor Who' needing a Producer; a job Derrick Sherwin had been doing for some time in an unofficial capacity whenever Bryant was away. However, with the series' future looking increasingly uncertain (see 'Season 6 Special' release), BBC Head of Department Shaun Sutton was unwilling to appoint a fresh Producer, realising that the show might be closed down forever within a few months. Hence Sherwin was invited to become formal Producer of the series, effective immediately.

With Terrance Dicks busy writing the following, epic length serial, it thus fell to Sherwin to oversee virtually all aspects of 'The Space Pirates', both as Script Editor and as 'trailing' Producer. Having this rare autonomy on the show did, however, afford him one advantage; a story that was one hundred percent his conception, handled one hundred percent his way.

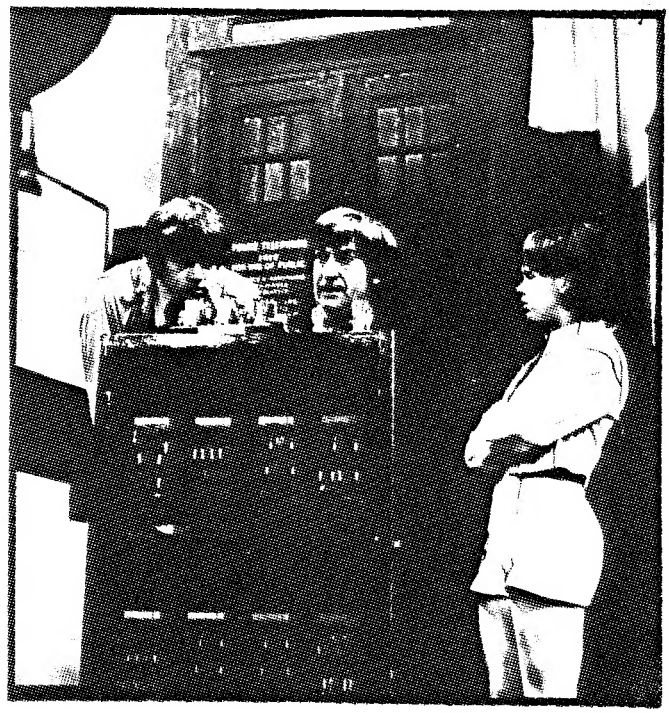
With the Apollo missions just six months away from achieving the first manned landing on the Moon, public interest in space travel was hitting an all-time high. Sherwin, keenly interested both in this and in science and technology as a whole, decided to do a 'Doctor Who' story that would treat space travel as a serious concept. As the BBC Enterprises publicity material later proclaimed, he wanted "a space saga with emphasis firmly placed on the inter-stellar ships Man could well be using in the future, with accurate and exciting shots of these vehicles combined with a strong thriller story".

To achieve the realistic look he wanted, Sherwin knew that he had to go beyond the boundaries of the BBC's own Visual Effects Department. He had been vaguely disappointed with the modelwork in 'The Seeds of Death' (Serial "XX"), feeling that it owed more to 1930's 'Buck Rogers' than to 1960's state of the art, which had been so influenced by the film '2001: A Space Odyssey'. The elegance and grace of the craft in '2001' was Sherwin's target, and to this end he took the unusual step of appointing <u>two</u> Designers to 'The Space Pirates'. Ian Watson was selected to handle the live action set design, but responsibility for all the extensive modelwork went to John Wood (see page "49-08").

Resisting any temptation to adopt a 'Blue Danube' approach to the incidental music for this story, Dudley Simpson instead went back to the 1950s for his inspiration. The underlying score had an ethereal feel to it, achieved mainly through singer Mary Thomas augmenting the three piece orchestration with falsetto high notes which, when modulated, gave the music a 'shivery' quality, eloquent of the vast emptiness of space. The instruments used by Simpson, Terrance MacDonach and Eric Allen (e.g. oboe and percussion) were specifically chosen to give a thin, reedy feel to the score. Each of the main elements in the story had a theme specially composed for it. The cave scenes on Ta, for example, were accompanied by a passage entitled 'Questions', while the stirring sight of the V Ship in flight was overlaid by a piece called 'True Blue'.

Although no special opening graphics sequence was made for this serial, the story title, writer and episode number slides were not shown as part of the standard title sequence. Instead, the credits were flashed up after the reprise, over a plain white, defocused caption slide.

One feature of the V Ship flight deck set was its monitor screens which fed continually changing read-outs to the actors in real time. Penn's navigation station featured a large Eidophore screen (see page "45-11") which could receive mixed static or animated shots from up to three cameras.



No location work was done for this story, although a certain amount of film was shot at Ealing for the later episodes. This was mainly for sequences set in the caves on the planet Ta, such as the Zoe-point-of-view shot as she looks through a fissure in the cave wall and sees a team of pirates working down in the next gallery. For episode six, though, every scene involving the Doctor, Jamie and Zoe had to be pre-filmed at Ealing. None of them could be present in Studio 4, Television Centre on the recording date (February 7th, 1969) as they were all down in Brighton on a week's location filming for the next story. For the studio scenes where the Doctor is heard talking to Milo Clancey over the radio, the Doctor's lines were all pre-recorded.

The cliff-hanger to episode five - the Doctor finding himself in a mine tunnel directly beneath the LIZ 79 as she lifts off - was also shot on film. The effects of the launch were shown by blasting huge quantities of dry ice down on to the set, accompanied by a blaze of white studio lights from above.

Some mechanical floor effects were done in the electronic studio. Small electrical detonators blew chunks out of the sets in response to the pirates firing their guns (all of which had lights fitted to cue the effects technician), while the flash fire in Dom Issigri's cell was achieved by dousing a tray of hot coals with water on cue, to generate a sudden burst of smoke.

For the shot where a pirate guard touches the booby trapped wire from a junction box in the cave wall, the resulting arc was achieved by superimposing the image from a spark generator, while the box itself was made to fly off the wall by the simple provision of a sprung mouse trap.

PRODUCTION CREDITS

SERIAL "YY" — SIX EPISODES — BLACK AND WHITE

PART 1	-	8th. March 1969
PART 2	-	15th. March 1969
PART 3	-	22nd. March 1969
PART 4	-	29th. March 1969
PART 5	-	5th. April 1969
PART 6	-	12th. April 1969

CAST

Doctor Who.....Patrick Troughton
Jamie.....Frazer Hines
Zoe.....Wendy Padbury

Dervish.....Brian Peck
Caven.....Dudley Foster
General Hermack.....Jack May
Major Ian Warne.....Donald Gee
Technician Penn.....George Layton
Lieutenant Sorba.....Nik Zaran
Space Guard.....Anthony Donovan
Milo Clancey.....Gordon Gostelow
Madeleine Issigri.....Lisa Daniely
Dom Issigri.....Esmond Knight
Issigri HQ Secretary.Valerie Stanton
Pirate Guards.....Steve Peters
Bill Richards, Edward Cogdell
Leslie Conrad, John Caesar
Space Corps Technicians.Terry Nelson
Tom Segal, Ray Turton
Neville Simons
Space Corps Guards.....Clive Rogers
Neville Simons, Peter Roy
Alf Coster, Tony Hutchins
Non-speaking artists....Derek Chafer
James Haswell

TECHNICAL CREDITS

Production Assistant
Snowy Lidiard-White
Assistant Floor Manager..Liam Foster
Assistant.....Marianne Willison
Grams Operators.....David Silk
Ron Arnett
Vision Mixers.....David Hanks
Clive Halls
Floor Assistant.....John Turner
Lighting.....Peter Winn
Sound.....David Hughes
Technical Manager.....Derek Martin
Visual Effects.....John Wood
Special Sound.....Brian Hodgson
Costumes.....Nicholas Bullen
Make-up.....Sylvia James
Sallie Evans
Incidental Music.....Dudley Simpson
Script Editor.....Derrick Sherwin
Desiger.....Ian Watson
Producer.....Peter Bryant
Director.....Michael Hart